IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of Buchman *et al.*	Confirmation No. 6972
Serial No.: 09/524,101	Art Unit: 1634
Filed: March 13, 2000	Examiner: Jeanine Goldberg
For: INSECT P53 TUMOR SUPPRESSOR GENES AND PROTEINS	Attorney Docket No: EX00-015C

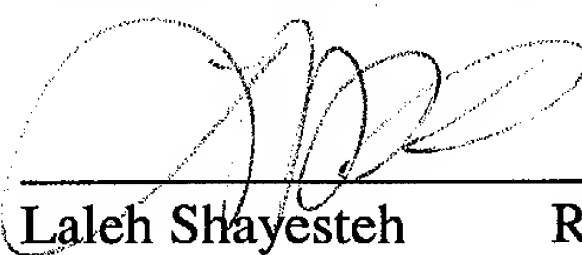## STATEMENT UNDER 37 CFR 1.821-1.825

VIA FEDERAL EXPRESS TO: U.S. Patent and Trademark Office
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7th Floor Receptionist
1911 S. Clark Street
Arlington, VA 22202

Examiner Goldberg:

In adherence with 37 CFR 1.821-1825, this response is accompanied by a diskette containing SEQ ID NOS 01-32 in computer readable form and a paper copy of the sequence information. The computer readable Sequence Listing was prepared through the use of the software program "PatentIn" provided by the Patent and Trademark Office. The sequence information recorded in computer readable form is identical to that of the written Sequence Listing submitted and introduces no new matter.

Respectfully submitted,

Dated: June 3, 2003

Laleh Shayesteh   Reg. No. 47,937

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170 Harbor Way, P.O. Box 511
South San Francisco, California 94083-0511
Tel: (650) 837-8223; Fax: (650) 837-8234

SEQUENCE LISTING

<110>   EXELIXIS, INC.

<120>   INSECT P53 TUMOR SUPPRESSOR GENES AND PROTEINS

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<141>   2000-03-13

<150>   US 09/268,969
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Asp Glu Pro Thr Leu Asn Asp Leu Asn Tyr Ser Asn Ile Leu Asn Gly
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Ser Ile Val Ala Asn Asp Asp Ser Lys Met Val His Leu Ile Phe Pro
        50   55   60

Gly Val Gln Thr Ser Val Pro Ser Asn Asp Glu Tyr Asp Gly Pro Tyr
65   70   75   80

Glu Phe Glu Val Asp Val His Pro Thr Val Ala Lys Asn Ser Trp Val
                85   90   95

Tyr Ser Thr Thr Leu Asn Lys Val Tyr Met Thr Met Gly Ser Pro Phe
            100   105   110

Pro Val Asp Phe Arg Val Ser His Arg Pro Pro Asn Pro Leu Phe Ile
            115   120   125

Arg Ser Thr Pro Val Tyr Ser Ala Pro Gln Phe Ala Gln Glu Cys Val
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            180   185   190

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6

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Asp Lys Glu Lys Asp Glu Lys Asp Asn Thr Ala Asn Thr Asn Leu Pro
            260   265   270

His Gly Lys Lys Arg Lys Met Glu Lys Pro Ser Lys Lys Pro Met Gln
        275   280   285

Thr Gln Ala Glu Asn Asp Thr Lys Glu Phe Thr Leu Thr Ile Pro Leu
    290   295   300

Val Gly Arg His Asn Glu Gln Asn Val Leu Lys Tyr Cys His Asp Leu
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8

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Leu Asn Lys Ile Phe Ile Gly Ile Asn Val Lys Phe Pro Val Ala Phe
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Ser Val Gln Asn Arg Pro Gln Asn Leu Pro Leu Tyr Ile Arg Ala Thr
            115             120             125

Pro Val Phe Ser Gln Thr Gln His Phe Gln Asp Leu Val His Arg Cys
    130             135             140

Val Gly His Arg His Pro Gln Asp Gln Ser Asn Lys Gly Val Ala Pro
145             150             155                 160

His Ile Phe Gln His Ile Ile Arg Cys Thr Asn Asp Asn Ala Leu Tyr
            165             170             175

Phe Gly Asp Lys Asn Thr Gly Thr Arg Leu Asn Ile Val Leu Pro Leu
            180             185             190

Ala His Pro Gln Val Gly Glu Asp Val Val Lys Glu Phe Phe Gln Phe
            195             200             205

Val Cys Lys Asn Ser Cys Pro Leu Gly Met Asn Arg Arg Pro Ile Asp
    210             215             220

Val Val Phe Thr Leu Glu Asp Asn Lys Gly Glu Val Phe Gly Arg Arg
225             230             235                 240

Leu Val Gly Val Arg Val Cys Ser Cys Pro Lys Arg Asp Lys Asp Lys
            245             250             255

Glu Glu Lys Asp Met Glu Ser Ala Val Pro Pro Arg Arg Lys Lys Arg
            260             265             270

Lys Leu Gly Asn Asp Glu Arg Arg Val Val Pro Gln Gly Ser Ser Asp
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9

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Ser Ser Tyr Leu Ser Ala Pro Ile Phe Pro Pro Ser Glu Pro Leu Glu

Leu Cys Asn Thr Glu Tyr Pro Gly Pro Leu Asn Phe Glu Val Phe Val
    50   55   60

Asp Pro Asn Val Leu Lys Asn Pro Trp Glu Tyr Ser Pro Ile Leu Asn
65   70   75   80

Lys Ile Tyr Ile Asp Met Lys His Lys Phe Pro Ile Asn Phe Ser Val
                85   90   95

Lys Lys Ala Asp Pro Glu Arg Arg Leu Phe Val Arg Val Met Pro Met
            100   105   110

Phe Glu Glu Asp Arg Tyr Val Gln Glu Leu Val His Arg Cys Ile Cys
        115   120   125

His Glu Gln Leu Thr Asp Pro Thr Asn His Asn Val Ser Glu Met Val
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Thr Gln Ala Glu Lys Arg Val Glu Arg Cys Val Gln His Phe His Glu
        35   40   45

Ser Ser Thr Ser Gly Ile Gln Thr Glu Ile Ala Lys Asn Val Leu His
    50   55   60

Ser Ser Arg Glu Ile Gly Thr Gln Gly Val Tyr Tyr Cys Gly Lys Val
65   70   75   80

Asp Met Ala Asp Ser Trp Tyr Ser Val Leu Val Glu Phe Met Arg Thr
                85   90   95

Ser Ser Glu Ser Cys Ser His Ala Tyr Gln Phe Ser Cys Lys Asn Ser
            100   105   110

Cys Ala Thr Gly Ile Asn Arg Arg Ala Ile Ala Ile Ile Phe Thr Leu
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17

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22

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23

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26

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27

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29

ctttt   27425

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gccgatgtcg cggcgggaat agagcgattc gcagtccaaa cacgatgata aaccccattg     180

catccgagtc ggaggccatc aattcggcca cctatgtgga caactatatc gattcggtgg     240

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acagaggcct cattcgcgac gtagaccact actacgacct gtatctgtcc ctgcagaact     360

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cggccaaaga tctgtacgcc ttgggcggct atgcaggtgg tgttgtgcct ggttctaatg     720

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gcagtggcga gcgcaaatcc tcgttgggcg gtgccagtgg agcgggacag ggacgaaagg    1020

ccagtctgca gtcggcttct ggcagtttgg ctagcggctc tgcagccacg agcagtggag    1080

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30

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tgactttctt agacccgatc ccttttcgac tttcccctct ttcacccagt ttagatccct    1620

cgcttctatg gttataggtc gtcagttttc atttaaagtt tctgtacaaa caatatcttt    1680

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<213> Drosophila melanogaster

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Gln Arg Gln Leu Ser Arg Ile Arg Asp Ile Asp Val Gln Tyr Arg Gly
        35                  40                  45


Leu Ile Arg Asp Val Asp His Tyr Tyr Asp Leu Tyr Leu Ser Leu Gln
    50                  55                  60


Asn Ser Ala Asp Ala Gly Arg Arg Ser Arg Ser Ile Ser Arg Met His
65                  70                  75                  80


Gln Ser Leu Ile Gln Ala Gln Glu Leu Gly Asp Glu Lys Met Gln Ile
                85                  90                  95


Val Asn His Met Gln Glu Ile Ile Asp Gly Lys Leu Arg Gln Leu Asp
                100                 105                 110


Thr Asp Gln Gln Asn Leu Asp Leu Lys Glu Asp Arg Asp Arg Tyr Ala
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Leu Leu Asp Asp Gly Thr Pro Ser Lys Leu Gln Arg Leu Gln Ser Pro
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31
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Met Arg Glu Gln Gly Asn Gln Ala Gly Thr Gly Asn Gly Gly Leu Asn
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Gly Asn Gly Leu Leu Ser Ala Lys Asp Leu Tyr Ala Leu Gly Gly Tyr
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Ala Gly Gly Val Val Pro Gly Ser Asn Ala Met Thr Ser Gly Asn Gly
                180                185                190

Gly Gly Ser Thr Pro Asn Ser Glu Arg Ser Ser His Val Ser Asn Gly
                195                200                205

Gly Asn Ser Gly Ser Asn Gly Asn Ala Ser Gly Gly Gly Gly Gly Glu
        210                215                220

Leu Gln Arg Thr Gly Ser Lys Arg Ser Arg Arg Arg Asn Glu Ser Val
225                230                235                240

Val Asn Asn Gly Ser Ser Leu Glu Met Gly Gly Asn Glu Ser Asn Ser
                245                250                255

Ala Asn Glu Ala Ser Gly Ser Gly Gly Gly Ser Gly Glu Arg Lys Ser
                260                265                270

Ser Leu Gly Gly Ala Ser Gly Ala Gly Gln Gly Arg Lys Ala Ser Leu
        275                280                285

Gln Ser Ala Ser Gly Ser Leu Ala Ser Gly Ser Ala Ala Thr Ser Ser
        290                295                300

Gly Ala Ala Gly Gly Gly Gly Ala Asn Gly Ala Gly Val Val Gly Gly
305                310                315                320

Asn Asn Ser Gly Lys Lys Lys Lys Arg Lys Val Arg Gly Ser Gly Ala
                325                330                335

Ser Asn Ala Asn Ala Ser Thr Arg Glu Glu Thr Pro Pro Pro Glu Thr
                340                345                350

Ile Asp Pro Asp Glu Pro Thr Tyr Cys Val Cys Asn Gln Ile Ser Phe
        355                360                365

Gly Glu Met Ile Leu Cys Asp Asn Asp Leu Cys Pro Ile Glu Trp Phe

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                370                     375                     380

His Phe Ser Cys Val Ser Leu Val Leu Lys Pro Lys Gly Lys Trp Phe
385                     390                 395                 400


Cys Pro Asn Cys Arg Gly Glu Arg Pro Asn Val Met Lys Pro Lys Ala
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Gln Phe Leu Lys Glu Leu Glu Arg Tyr Asn Lys Glu Lys Glu Glu Lys
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Thr
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<212> DNA
<213> Drosophila melanogaster

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tcgaagatgc gcgatattag ggagtccatc aacgaggcaa acgattcggt ggccaagaac       360

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33

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<212> PRT
<213> Drosophila melanogaster

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                20   25   30

Phe Asn Pro Ile Leu Leu Asn Lys Tyr Ser Val Leu Glu Ala Leu Gly
            35   40   45

Glu Leu Ile Pro Glu Leu Pro Ala Lys Gly Val Val Gln Met Lys Asn
        50   55   60

Ala Phe Phe His Lys Ala Leu Ile Met Leu Tyr Met Asp His Ser Leu
65   70   75   80

Val Gly Asp Asp Thr His Met Arg Glu Ile Ile Lys Glu Gly Met Leu
                85   90   95

Asp Ile Asn Leu Glu Asn Leu Asn Arg Lys Tyr Thr Asn Gln Val Ala
                100   105   110

Asp Ile Ser Glu Met Asp Glu Arg Val Leu Leu Ser Val Gln Gly Ala
            115   120   125

Ile Glu Thr Lys Gly Asp Ser Pro Lys Ser Pro Gln Leu Ala Phe Gln
        130   135   140

Thr Ser Ser Ser Pro Ser His Arg Lys Leu Ser Thr His Asp Leu Pro
145   150   155   160

Ala Ser Leu Pro Leu Ser Ile Ile Lys Ala Phe Pro Lys Lys Glu Asp
                165   170   175

Ala Asp Lys Ile Val Asn Tyr Leu Asp Gln Thr Leu Glu Glu Met Asn
                180   185   190

Arg Thr Phe Thr Met Ala Val Lys Asp Phe Leu Asp Ala Lys Leu Ser
        195   200   205

Gly Lys Arg Phe Arg Gln Ala Arg Gly Leu Tyr Tyr Lys Tyr Leu Gln
        210   215   220

Lys Ile Leu Gly Pro Glu Leu Val Gln Lys Pro Gln Leu Lys Ile Gly
225   230   235   240

Gln Leu Met Lys Gln Arg Lys Leu Thr Ala Ala Leu Leu Ala Cys Cys
                245   250   255

Leu Glu Leu Ala Leu His Val His His Lys Leu Val Glu Gly Leu Arg
                260   265   270

Phe Pro Phe Val Leu His Cys Phe Ser Leu Asp Ala Tyr Asp Phe Gln
        275   280   285

Lys Ile Leu Glu Leu Val Val Arg Tyr Asp His Gly Phe Leu Gly Arg
        290   295   300

Glu Leu Ile Lys His Leu Asp Val Val Glu Glu Met Cys Leu Glu Ser
305   310   315   320

Leu Ile Phe Arg Lys Ser Ser Gln Leu Trp Trp Glu Leu Asn Gln Arg
                325   330   335

Leu Pro Arg Tyr Lys Glu Val Asp Ala Glu Thr Glu Asp Lys Glu Asn
                340   345   350

Phe Ser Thr Gly Ser Ser Ile Cys Leu Arg Lys Phe Tyr Gly Leu Ala
        355   360   365

Asn Arg Arg Leu Leu Leu Leu Cys Lys Ser Leu Cys Leu Val Asp Ser
        370   375   380

Phe Pro Gln Ile Trp His Leu Ala Glu His Ser Phe Thr Leu Glu Ser
385   390   395   400

Ser Arg Leu Leu Arg Asn Arg His Leu Asp Gln Leu Leu Leu Cys Ala
                405   410   415

Ile His Leu His Val Arg Leu Glu Lys Leu His Leu Thr Phe Ser Met

36

Ile Ile Gln His Tyr Arg Arg Gln Pro His Phe Arg Arg Ser Ala Tyr
        435   440   445

Arg Glu Val Ser Leu Gly Asn Gly Gln Thr Ala Asp Ile Ile Thr Phe
        450   455   460

Tyr Asn Ser Val Tyr Val Gln Ser Met Gly Asn Tyr Gly Arg His Leu
465   470   475   480

Glu Cys Ala Gln Thr Arg Lys Ser Leu Glu Glu Ser Gln Ser Ser Val
                485   490   495

Gly Ile Leu Thr Glu Asn Asn Phe Gln Arg Ile Glu His Glu Ser Gln
                500   505   510

His Gln His Ile Phe Thr Ala Pro Ser Gln Gly Met Pro Lys Trp Leu
        515   520   525

Leu Leu Gln Ser Ser Thr Phe Ile Ser Arg Arg Ile Thr Thr Phe Leu
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Ala Lys Leu Ala Gln Arg Lys Ala Cys Cys Phe Glu
545   550   555

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Lys Ile Cys Ser Cys Pro Lys Arg Asp
1   5

<210> 25
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Arg Val Cys Ser Cys Pro Lys Arg Asp
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Lys Val Cys Ser Cys Pro Lys Arg Asp
1   5

<210> 27
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Arg Ile Cys Thr Cys Pro Lys Arg Asp
1   5

<210> 28
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Lys Ile Cys Thr Cys Pro Lys Arg Asp
1   5

<210> 29
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Arg Val Cys Thr Cys Pro Lys Arg Asp
1   5

<210> 30
<211> 9

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<400>   30

Lys Val Cys Thr Cys Pro Lys Arg Asp
1               5


<210>   31
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<400>   31

Phe Xaa Cys Lys Asn Ser Cys
1               5


<210>   32
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<400>   32

Phe Xaa Cys Gln Asn Ser Cys
1               5
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